Whole scope is clear of art.

10/553,937B Yong Chu 08-13-2007

$%^STN;HighlightOn=;HighlightOff=;

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NEWS 1		Web Page for STN Seminar Schedule - N. America
NEWS 2	MAY 01	New CAS web site launched
NEWS 3	MAY 08	CA/CAplus Indian patent publication number format defined
NEWS 4	MAY 14	RDISCLOSURE on STN Easy enhanced with new search and display fields
NEWS 5	MAY 21	BIOSIS reloaded and enhanced with archival data
NEWS 6	MAY 21	TOXCENTER enhanced with BIOSIS reload
NEWS 7	MAY 21	CA/CAplus enhanced with additional kind codes for German patents
NEWS 8	MAY 22	CA/CAplus enhanced with IPC reclassification in Japanese patents
NEWS 9	JUN 27	CA/CAplus enhanced with pre-1967 CAS Registry Numbers
NEWS 10	JUN 29	STN Viewer now available
NEWS 11	JUN 29	STN Express, Version 8.2, now available
NEWS 12	JUL 02	LEMBASE coverage updated
NEWS 13	JUL 02	LMEDLINE coverage updated
NEWS 14	JUL 02	SCISEARCH enhanced with complete author names
NEWS 15	JUL 02	CHEMCATS accession numbers revised
NEWS 16	JUL 02	CA/CAplus enhanced with utility model patents from China
NEWS 17	JUL 16	CAplus enhanced with French and German abstracts
NEWS 18	JUL 18	CA/CAplus patent coverage enhanced
NEWS 19	JUL 26	USPATFULL/USPAT2 enhanced with IPC reclassification
NEWS 20	JUL 30	USGENE now available on STN
NEWS 21	AUG 06	CAS REGISTRY enhanced with new experimental property tags
NEWS 22	AUG 06	BEILSTEIN updated with new compounds
NEWS 23	AUG 06	FSTA enhanced with new thesaurus edition
NEWS 24	AUG 13	CA/CAplus enhanced with additional kind codes for granted patents

NEWS EXPRESS 29 JUNE 2007: CURRENT WINDOWS VERSION IS V8.2,
CURRENT MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP),
AND CURRENT DISCOVER FILE IS DATED 05 JULY 2007.

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NEWS LOGIN	Welcome Banner and News Items
NEWS IPC8	For general information regarding STN implementation of IPC 8

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FILE 'HOME' ENTERED AT 14:19:00 ON 13 AUG 2007

=>
=> file reg

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	0.21	0.21

FILE 'REGISTRY' ENTERED AT 14:19:15 ON 13 AUG 2007
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Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 12 AUG 2007 HIGHEST RN 944447-30-7
DICTIONARY FILE UPDATES: 12 AUG 2007 HIGHEST RN 944447-30-7

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http://www.cas.org/support/stngen/stndoc/properties.html

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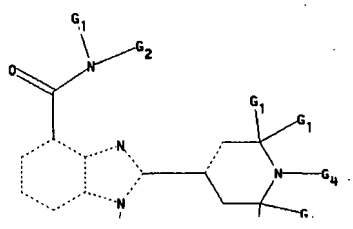

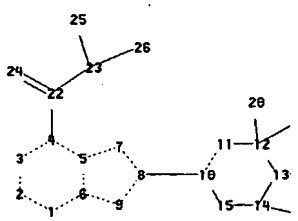

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16  17  20  21  22  23  24  25  26  31  33
ring nodes :
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chain bonds :
4-22  8-10  9-31  12-20  12-21  13-33  14-16  14-17  22-23  22-24  23-25  23-26

ring bonds :
1-2  1-6  2-3  3-4  4-5  5-6  5-7  6-9  7-8  8-9  10-11  10-15  11-12  12-13  13-14
14-15
exact/norm bonds :
1-2  1-6  2-3  3-4  4-5  5-6  5-7  6-9  7-8  8-9  9-31  10-11  10-15  11-12  12-13
12-20  12-21  13-14  13-33  14-15  14-16  14-17  22-23  22-24  23-25  23-26
exact bonds :
4-22  8-10


G1:CH3,CH2,CH,Et,n-Pr,i-Pr,n-Bu,i-Bu,s-Bu,H

G2:H,CH3,CH,Et,i-Bu,t-Bu,OH,MeO,EtO,n-PrO,i-PrO,n-BuO,i-BuO,s-BuO,t-BuO

G3:H,CH3,CH2,CH,Et,n-Pr,i-Pr,n-Bu,i-Bu,s-Bu,t-Bu,Cb

G4:H,O,N

Match level :
1:Atom  2:Atom  3:Atom  4:Atom  5:Atom  6:Atom  7:Atom  8:Atom  9:Atom  10:Atom
11:Atom  12:Atom  13:Atom  14:Atom  15:Atom  16:CLASS  17:CLASS  20:CLASS  21:CLASS
22:CLASS  23:CLASS
24:CLASS  25:CLASS  26:CLASS  31:CLASS  33:CLASS



L1      STRUCTURE UPLOADED

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L1 HAS NO ANSWERS
L1              STR

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY -  AVAILABLE VIA OFFLINE PRINT *

Structure attributes must be viewed using STN Express query preparation.


=> s l1
SAMPLE SEARCH INITIATED 14:19:57 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED -       30 TO ITERATE

100.0% PROCESSED       30 ITERATIONS                                1 ANSWERS
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS:  ONLINE  **COMPLETE**
                        BATCH   **COMPLETE**
PROJECTED ITERATIONS:          272 TO      928
PROJECTED ANSWERS:               1 TO       80

L2            1 SEA SSS SAM L1
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FULL SCREEN SEARCH COMPLETED -      579 TO ITERATE

100.0% PROCESSED      579 ITERATIONS                                  11 ANSWERS
SEARCH TIME: 00.00.01

L3            11 SEA SSS FUL L1

=> file caplus
COST IN U.S. DOLLARS                                  SINCE FILE      TOTAL
                                                         ENTRY    SESSION
FULL ESTIMATED COST                                     172.55     172.76

FILE 'CAPLUS' ENTERED AT 14:20:09 ON 13 AUG 2007
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FILE COVERS 1907 - 13 Aug 2007  VOL 147 ISS 8
FILE LAST UPDATED: 12 Aug 2007  (20070812/ED)

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=> s l3
L4            10 L3

=> d ibib abs hitstr tot

L4   ANSWER 1 OF 10  CAPLUS  COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER:         2006:1070298  CAPLUS  Full-text
DOCUMENT NUMBER:          145:419147
TITLE:                    Preparation of 2-substituted-1H-benzimidazole-4-
                          carboxamides as PARP inhibitors for the treatment of
                          inflammation, sepsis and septic shock
INVENTOR(S):              Zhu, Gui-Dong; Gandhi, Virajkumar B.; Gong, Jianchun;
                          Penning, Thomas D.; Giranda, Vincent L.; Thomas,
                          Sheela
PATENT ASSIGNEE(S):       USA
SOURCE:                   U.S. Pat. Appl. Publ., 21pp.
                          CODEN: USXXCO
DOCUMENT TYPE:            Patent
LANGUAGE:                 English
FAMILY ACC. NUM. COUNT:   1
PATENT INFORMATION:
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PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2006229351	A1	20061012	US 2006-401635	20060411
WO 2006110683	A1	20061019	WO 2006-US13366	20060411

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW

RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

PRIORITY APPLN. INFO.: US 2005-670205P P 20050411

OTHER SOURCE(S): MARPAT 145:419147

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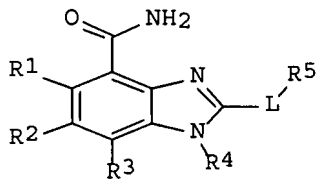

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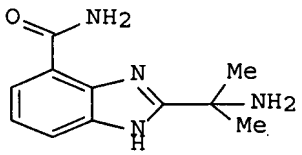


II

AB Title compds. I [wherein R1 - R4 = H, alkyl, hydroxyalkyl, etc.; R5 = heteroaryl, heteroarylalkoxy, heteroaryloxy, etc.; L = alkylene, alkenylene, cycloalkylene, etc.] and therapeutically acceptable salts were prepd. as poly(ADP-ribose)polymerase (PARP) inhibitors. For instance, amidation of 2-[[(benzyloxy)carbonyl]amino]-2-methylpropanoic acid with 2,3-diaminobenzamide dihydrochloride followed by mol. cyclization in refluxing acetic acid and subsequent hydrogenolysis gave benzimidazolecarboxamide II. I were found to be active PARP inhibitors that can penetrate cell membranes. Therefore, the invented compds. and their pharmaceutical compns. are useful for treating diseases assocd. with PARP, including inflammation, sepsis and septic shock.

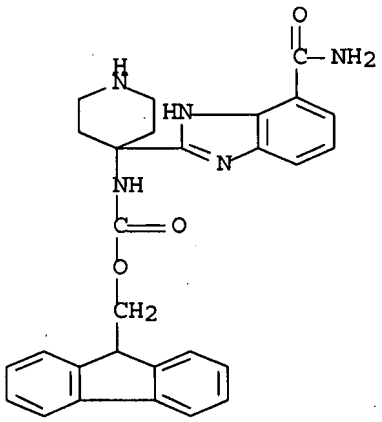
IT 912336-22-2P

RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)

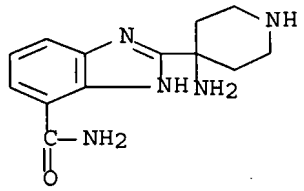
(inhibitor; prepn. of benzimidazolecarboxamides as PARP inhibitors for treatment of inflammation, sepsis and septic shock)

RN 912336-22-2 CAPLUS

CN Carbamic acid, [4-[7-(aminocarbonyl)-1H-benzimidazol-2-yl]-4-piperidinyl]-, 9H-fluoren-9-ylmethyl ester (9CI) (CA INDEX NAME)



IT 912336-26-6P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(inhibitor; prepn. of benzimidazolecarboxamides as PARP inhibitors for treatment of inflammation, sepsis and septic shock)
RN 912336-26-6 CAPLUS
CN 1H-Benzimidazole-4-carboxamide, 2-(4-amino-4-piperidinyl)- (9CI) (CA INDEX NAME)



L4 ANSWER 2 OF 10 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2006:1069940 CAPLUS Full-text
DOCUMENT NUMBER: 145:419145
TITLE: Preparation of 1H-benzimidazole-4-carboxamides as poly(ADP-ribose)polymerase (PARP) inhibitors.
INVENTOR(S): Zhu, Gui-Dong; Gong, Jianchun; Gandhi, Virajkumar B.; Penning, Thomas D.; Giranda, Vincent L.
PATENT ASSIGNEE(S): USA
SOURCE: U.S. Pat. Appl. Publ., 34pp.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2006229289	A1	20061012	US 2006-401638	20060411
WO 2006110816	A2	20061019	WO 2006-US13652	20060411
WO 2006110816	A3	20070104		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW

RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

PRIORITY APPLN. INFO.: US 2005-670204P P 20050411

OTHER SOURCE(S): MARPAT 145:419145

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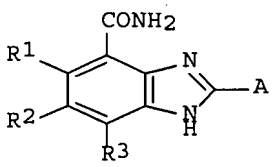


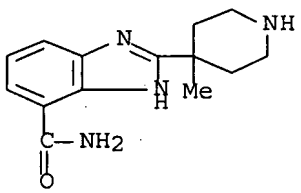
I

AB Title compds. [I; R1-R3 = H, alkyl, alkenyl, alkynyl, alkoxy, alkoxycarbonyl, cyano, haloalkoxy, haloalkyl, halo, OH, hydroxyalkyl, NO2, amino, aminocarbonyl; A = nonarom. (substituted) 4-8 membered ring contg. 1-2 N atoms and optionally 1 S or O atom; A bears a Me group at the atom bonded to the imidazole ring], were prepd. Thus, 2-(2-methylpyrrolidin-2- yl)-1H-benzimidazole-4-carboxamide (prepn. starting from 1-benzyl 2-Me pyrrolidine-1,2-dicarboxylate and 2,3-diaminobenzamide dihydrochloride given) inhibited PARP with IC50 = 4.3 nM.

IT 912444-86-1P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(prepn. of benzimidazolecarboxamides as PARP inhibitors)

RN 912444-86-1 CAPLUS

CN 1H-Benzimidazole-4-carboxamide, 2-(4-methyl-4-piperidinyl)- (9CI) (CA INDEX NAME)



L4 ANSWER 3 OF 10 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2006:44136 CAPLUS Full-text

DOCUMENT NUMBER: 144:225970

TITLE: Critical role of PI3-kinase/Akt activation in the PARP

inhibitor induced heart function recovery during ischemia-reperfusion

AUTHOR(S): Kovacs, Krisztina; Toth, Ambrus; Deres, Peter; Kalai, Tamas; Hideg, Kalman; Gallyas, Ferenc; Sumegi, Balazs

CORPORATE SOURCE: Research Group for Mitochondrial Function and Mitochondrial Diseases, Department of Biochemistry and Medical Chemistry/Hungarian Academy of Sciences, Hung.

SOURCE: Biochemical Pharmacology (2006), 71(4), 441-452
CODEN: BCPCA6; ISSN: 0006-2952

PUBLISHER: Elsevier B.V.

DOCUMENT TYPE: Journal

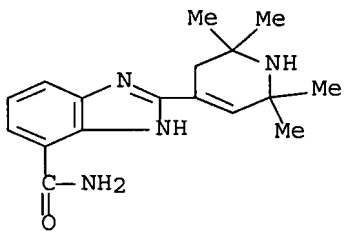
LANGUAGE: English

AB Poly(ADP-ribose) polymerase (PARP) inhibitors protect hearts from ischemia-reperfusion (IR)-induced damages by limiting NAD (NAD+) and ATP depletion, and by other, not yet elucidated mechanisms. Our preliminary data suggested that PARP catalyzed ADP-ribosylations may affect signaling pathways in cardiomyocytes. To clarify this possibility, we studied the effect of a well-characterized (4-hydroxyquinazoline) and a novel (carboxaminobenzimidazol-deriv.) PARP inhibitor on the activation of phosphatidylinositol-3-kinase (PI3-kinase)/Akt pathway in Langendorff-perfused hearts. PARP inhibitors promoted the restoration of myocardial energy metab. (assessed by 31P NMR spectroscopy) and cardiac function compared to untreated hearts. PARP inhibitors also attenuated the infarct size and reduced the IR-induced lipid peroxidn., protein oxidn. and total peroxide concn. Moreover, PARP inhibitors facilitated Akt phosphorylation and activation, as well as the phosphorylation of its downstream target glycogen synthase kinase-3.beta. (GSK-3.beta.) in normoxia and, more robustly, during IR. Blocking PI3-kinase by wortmannin or LY294002 reduced the PARP inhibitor-elicited robust Akt and GSK-3.beta. phosphorylation upon ischemia-reperfusion, and significantly diminished the recovery of ATP and creatine phosphate showing the importance of Akt activation in the recovery of energy metab. In addn., inhibition of PI3-kinase/Akt pathway decreased the protective effect of PARP inhibitors on infarct size and the recovery of heart functions. All these data suggest that contrary to the original view, which considered preservation of NAD+ and consequently ATP pools as the exclusive underlying mechanism for the cytoprotective effect of PARP inhibitors, the activation of PI3-kinase/Akt pathway and related processes are at least equally important in the cardioprotective effects of PARP inhibitors during ischemia-reperfusion.

IT 693803-52-0, HO-3089
RL: DMA (Drug mechanism of action); PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(crit. role of PI3-kinase/Akt signaling in PARP inhibitor induced heart function recovery during ischemia-reperfusion)

RN 693803-52-0 CAPLUS

CN 1H-Benzimidazole-4-carboxamide, 2-(1,2,3,6-tetrahydro-2,2,6,6-tetramethyl-4-pyridinyl)- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 41 THERE ARE 41 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 4 OF 10 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2004:965241 CAPLUS Full-text
DOCUMENT NUMBER: 141:410928
TITLE: Preparation of alicyclic-amine-substituted 4-carboxamido-benzimidazoles for use in pharmaceutical compositions as poly(ADP-ribose) polymerase (PARP) inhibitors and antioxidants
INVENTOR(S): Hideg, Kalman; Kalai, Tamas; Suemegi, Balazs
PATENT ASSIGNEE(S): Hung.
SOURCE: PCT Int. Appl., 46 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004096793	A1	20041111	WO 2004-HU43	20040427
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
EP 1622893	A1	20060208	EP 2004-729685	20040427
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US 2007072912	A1	20070329	US 2006-553937	20060921
PRIORITY APPLN. INFO.:			HU 2003-1154	A 20030428
			WO 2004-HU43	W 20040427

OTHER SOURCE(S): MARPAT 141:410928
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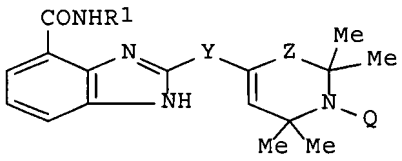

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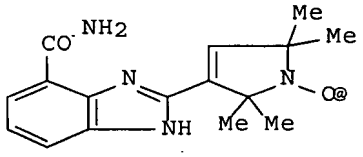


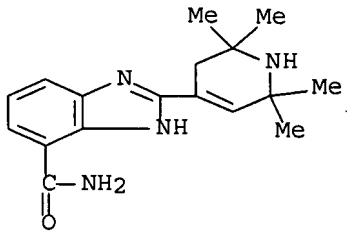
II

AB Benzimidazoles, such as I [R1 = H, alkyl, alkoxy; Q = H, oxy; Y = bond or linking group, such as SCH2, OCH2, alkylene, etc.; Z = bond or CH2;], were prepd. for therapeutic use as PARP inhibitors and antioxidants. Thus, 2-[1-oxy-2,2,5,5-tetramethyl-2,5-dihydro-1H-pyrrol-3-yl]-1H- benzimidazole-4-

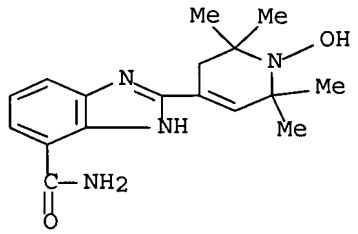
carboxamide (II) was prepd. via a cyclocondensation reaction in 51% yield of 2,3-diaminobenzamide with 3-formyl-2,2,5,5- tetramethyl-1-oxypyrroline. The prepd. benzimidazoles were assayed in vitro for PARP inhibitory activity and were assayed for inhibition of HO induced cell death in WRL-68 human liver cells.

IT 693803-52-0P 791591-34-9P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of alicyclic-amine-substituted 4-carboxamido-benzimidazoles for use in pharmaceutical compns. as poly(ADP-ribose) polymerase (PARP) inhibitors and antioxidants)

RN 693803-52-0 CAPLUS
CN 1H-Benzimidazole-4-carboxamide, 2-(1,2,3,6-tetrahydro-2,2,6,6-tetramethyl-4-pyridinyl)- (9CI) (CA INDEX NAME)



RN 791591-34-9 CAPLUS
CN 1H-Benzimidazole-4-carboxamide, 2-(1,2,3,6-tetrahydro-1-hydroxy-2,2,6,6-tetramethyl-4-pyridinyl)- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

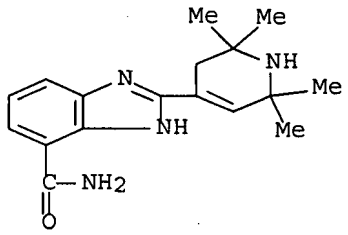
L4 ANSWER 5 OF 10 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2004:538725 CAPLUS Full-text
DOCUMENT NUMBER: 142:32704
TITLE: Myocardial protection by selective poly(ADP-ribose) polymerase inhibitors
AUTHOR(S): Kovacs, Krisztina; Toth, Ambrus; Deres, Peter; Kalai, Tamas; Hideg, Kalman; Sumegi, Balazs
CORPORATE SOURCE: Department of Biochemistry and Medical Chemistry, Faculty of Medicine, University of Pecs, Pecs, Hung.
SOURCE: Experimental & Clinical Cardiology (2004), 9(1), 17-20

CODEN: ECCAF7; ISSN: 1205-6626
PUBLISHER: Pulsus Group Inc.
DOCUMENT TYPE: Journal
LANGUAGE: English

AB During ischemia-reperfusion, reactive oxygen species are generated along the mitochondrial respiratory chain and induce lipid peroxidn., protein oxidn. and DNA damage. Single-strand DNA breaks are the most potent activators of poly(ADP-ribose) polymerase (PARP); prolonged action of PARP culminates in intracellular oxidized NAD (NAD+) and ATP depletion. The integrity of cellular components and the myocardial energy metab. can be preserved by using PARP inhibitors under conditions of ischemia and reperfusion. Oxidative stress is capable of activating the phosphoinositol-3-kinase-Akt/protein kinase B signaling pathway, which is further enhanced if treated with PARP inhibitors. Akt, in turn, promotes the survival of cardiomyocytes by inhibiting apoptosis, and causing metabolic adjustment and vasodilation in the jeopardized myocardium.

IT 693803-52-0, HO 3089
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(poly(ADP-ribose) polymerase inhibitor HO-3089 improved recovery of inorg. phosphates, myocardial energy metab., Akt activation, attenuated oxidative injury during ischemia-reperfusion in rat heart)

RN 693803-52-0 CAPLUS
CN 1H-Benzimidazole-4-carboxamide, 2-(1,2,3,6-tetrahydro-2,2,6,6-tetramethyl-4-pyridinyl)- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 21 THERE ARE 21 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

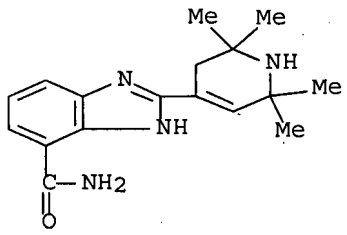
L4 ANSWER 6 OF 10 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2004:511475 CAPLUS Full-text
DOCUMENT NUMBER: 142:16741
TITLE: Hemorheological methods in drug research
AUTHOR(S): Marton, Zsolt; Halmosi, Robert; Alexy, Tamas; Horvath, Beata; Toth, Ambrus; Feher, Gergely; Koltai, Katalin; Kesmarky, Gabor; Habon, Tamas; Sumegi, Balazs; Hideg, Kalman; Toth, Kalman
CORPORATE SOURCE: 1st Department of Medicine Division of Cardiology, University of Pecs Medical School, Hung.
SOURCE: Clinical Hemorheology and Microcirculation (2004), 30(3,4), 243-252
CODEN: CHMIFQ; ISSN: 1386-0291
PUBLISHER: IOS Press
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Development of new drugs is a sophisticated process that requires several, different methods. In our expts. we have applied two rheol. models to study exptl. and clin. used drugs. The antioxidant properties of several agents were estd. by erythrocyte filtration technique. The known antioxidant compd. vitamin E was used to validate our measurements. An exptl. cardioprotective agent, H-2545 provided significant protection against oxidative changes in red blood cell filterability ($p<0.001$). Although some of the examd., known cardiovascular drugs also showed significant antioxidant effect, they were less efficient than H-2545 and the scavenger effect of this novel agent exceeded the antioxidant properties of vitamin E. Modification of mexiletine with a pyrroline ring improved significantly its antioxidant capacity suggesting this mol. segment to be responsible for the antioxidant effect. In our second model the antiplatelet effect of exptl. poly(ADP-ribose) polymerase (PARP) inhibitors was evaluated. Two widely used antiplatelet agents, i.e. acetyl salicylic acid and eptifibatide, served as controls in the validation of the measurements. PARP inhibitors reduced ADP-induced platelet aggregation in a dose-dependent manner ($p<0.05$). However, their hindrance on platelet aggregation waned as the concn. of ADP rose. Regarding the platelets role in the development of ischemic vascular diseases, the antiaggregating property of PARP inhibitors may exert addnl. beneficial effects on tissue blood supply under conditions of compromised vascular flow.

IT 693803-52-0, HO 3089
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(HO-3089 showed marked inhibition of platelet aggregation in PMS-treated human RBC)

RN 693803-52-0 CAPLUS

CN 1H-Benzimidazole-4-carboxamide, 2-(1,2,3,6-tetrahydro-2,2,6,6-tetramethyl-4-pyridinyl)- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 23 THERE ARE 23 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 7 OF 10 CAPLUS COPYRIGHT 2007 ACS on STN 1029

ACCESSION NUMBER: 2004:270493 CAPLUS Full-text

DOCUMENT NUMBER: 141:836

TITLE: Inhibition of ADP-evoked platelet aggregation by selected poly(ADP-ribose) polymerase inhibitors

AUTHOR(S): Alexy, Tamas; Toth, Ambrus; Marton, Zsolt; Horvath, Beata; Koltai, Katalin; Feher, Gergely; Kesmarky, Gabor; Kalai, Tamas; Hideg, Kalman; Sumegi, Balazs; Toth, Kalman

CORPORATE SOURCE: First Department of Medicine, Division of Cardiology, Medical School, University of Pecs, Pecs, 7624, Hung.

SOURCE: Journal of Cardiovascular Pharmacology (2004), 43(3), 423-431

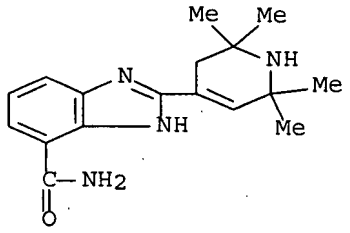
3/2004

CODEN: JCPCDT; ISSN: 0160-2446
PUBLISHER: Lippincott Williams & Wilkins
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Pathol. platelet activation has been implicated in the pathogenesis of ischemic heart disease. Since cardiomyocytes can be protected from ischemia-reoxygenation injury by poly(ADP-ribose) polymerase (PARP) inhibitors mimicking the adenine/ADP part of NAD+, their structural resemblance to ADP may also enable the blockade of platelet aggregation via binding to ADP receptors. Blood samples drawn from healthy volunteers were pre-incubated with different concns. of PARP inhibitors: 4-hydroxyquinazoline, 2-mercapto-4(3H)-quinazolinone, or HO-3089. ADP-, collagen- and epinephrine-induced platelet aggregation was evaluated according to the method described by Born. The effect of PARP inhibitors on thrombocyte aggregation was also examd. when platelets were sensitized by heparin and in the presence of incremental concns. of ADP. All examd. PARP inhibitors reduced the ADP-induced platelet aggregation in a dose-dependent manner (significant inhibition at 20 .mu.M for HO-3089 and at 500 .mu.M for the other agents; $P < 0.05$), even if platelets were sensitized with heparin. However, their hindrance on platelet aggregation waned as the concn. of ADP rose (no effect at 40 .mu.M ADP). PARP inhibitors had minimal effect on both collagen- and epinephrine-induced platelet aggregation. Our study first demonstrates the feasibility of a design for PARP inhibitors that does not only protect against ischemia-reperfusion-induced cardiac damage but may also prevent thrombotic events.

IT 693803-52-0, HO 3089
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(inhibition of ADP-evoked platelet aggregation by selected poly(ADP-ribose) polymerase inhibitors)

RN 693803-52-0 CAPLUS
CN 1H-Benzimidazole-4-carboxamide, 2-(1,2,3,6-tetrahydro-2,2,6,6-tetramethyl-4-pyridinyl)- (9CI) (CA INDEX NAME)



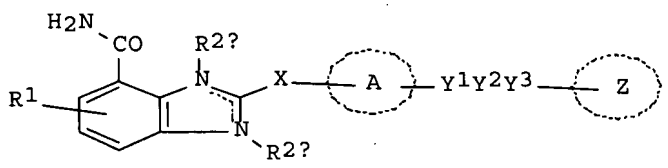
REFERENCE COUNT: 34 THERE ARE 34 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 8 OF 10 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2002:676008 CAPLUS Full-text
DOCUMENT NUMBER: 137:216949
TITLE: Preparation of benzimidazole derivatives as poly(ADP-ribose) polymerase (PARP) inhibitors
INVENTOR(S): Takayama, Kazuhisa; Kimura, Takenori; Masuda, Naoyuki; Naito, Ryo; Okamoto, Yoshinori; Koga, Yuji; Okada, Yohei; Takeuchi, Makoto
PATENT ASSIGNEE(S): Yamanouchi Pharmaceutical Co., Ltd., Japan
SOURCE: PCT Int. Appl., 46 pp.

CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002068407	A1	20020906	WO 2002-JP1741	20020226
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
AU 2002233746	A1	20020912	AU 2002-233746	20020226
PRIORITY APPLN. INFO.:			JP 2001-54693 A	20010228
			WO 2002-JP1741 W	20020226

OTHER SOURCE(S): MARPAT 137:216949
GI



I

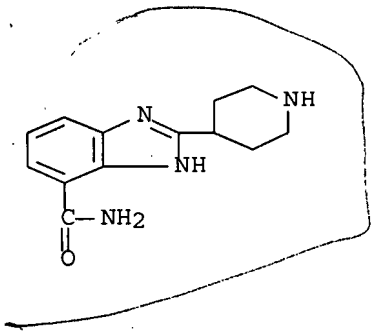
AB The title compds. I [R1 = H, alkyl, etc.; R2a, R2b = H, alkyl, or nonexistent; the dotted line indicates the double bond or single bond; ring A = N-contg. satd. heterocyclic ring; X = (oxo-substituted) alkylene, or bond; Y1, Y3 = (oxo-substituted) alkylene, etc.; Y2 = O, S, etc.; ring Z = (un)substituted cycloalkyl, etc.; provisos are given] are prepd. 2-[1-[4-(4-Fluorophenoxy)butyl]piperidin-4-yl]-1H-benzimidazole-4- carboxamide 2HCl salt in vitro showed IC50 of 8.2 nM against poly(ADP-ribose) polymerase.

IT 454715-39-0P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(intermediate; prepn. of benzimidazole derivs. as poly(ADP-ribose) polymerase inhibitors)

RN 454715-39-0 CAPLUS
CN 1H-Benzimidazole-4-carboxamide, 2-(4-piperidinyl)-, bis(trifluoroacetate) (9CI) (CA INDEX NAME)

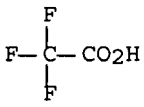
CM 1

CRN 272769-47-8
CMF C13 H16 N4 O



CM 2

CRN 76-05-1
CMF C2 H F3 O2



REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 9 OF 10 CAPLUS COPYRIGHT 2007 ACS on STN

10/935,683
6/8/2006

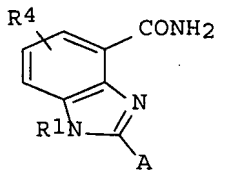
ACCESSION NUMBER: 2000:384161 CAPLUS Full-text
DOCUMENT NUMBER: 133:17464
TITLE: Preparation of benzimidazolecarboxamides as poly(ADP-ribose)polymerase inhibitors.
INVENTOR(S): Lubisch, Wilfried; Kock, Michael; Hoger, Thomas; Schult, Sabine; Grandel, Roland; Muller, Reinhold
PATENT ASSIGNEE(S): Basf Aktiengesellschaft, Germany
SOURCE: PCT Int. Appl., 44 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000032579	A1	20000608	WO 1999-EP9004	19991123
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
DE 19916460	A1	20001019	DE 1999-19916460	19990412
DE 19916460	B4	20061221		
CA 2352554	A1	20000608	CA 1999-2352554	19991123
CA 2352554	C	20061010		
BR 9915701	A	20010814	BR 1999-15701	19991123

EP 1133477	A1	20010919	EP 1999-964497		19991123
EP 1133477	B1	20040218			
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO					
TR 200101498	T2	20011121	TR 2001-200101498		19991123
HU 200200749	A2	20020828	HU 2002-749		19991123
HU 200200749	A3	20030328			
JP 2002531442	T	20020924	JP 2000-585221		19991123
JP 3432800	B2	20030804			
AU 764216	B2	20030814	AU 2000-30343		19991123
NZ 511825	A	20030829	NZ 1999-511825		19991123
AT 259789	T	20040315	AT 1999-964497		19991123
PT 1133477	T	20040630	PT 1999-964497		19991123
ES 2216625	T3	20041016	ES 1999-964497		19991123
SK 285529	B6	20070301	SK 2001-714		19991123
TW 247741	B	20060121	TW 1999-88120715		19991126
ZA 2001004118	A	20020521	ZA 2001-4118		20010521
MX 2001PA05197	A	20020108	MX 2001-PA5197		20010524
US 6448271	B1	20020910	US 2001-856686		20010524
US 39608	E1	20070501	US 2001-935683		20010524
NO 2001002570	A	20010713	NO 2001-2570		20010525
IN 2001CN00730	A	20050304	IN 2001-CN730		20010525
BG 105596	A	20020228	BG 2001-105596		20010613
BG 65047	B1	20070131			
HR 2001000484	A1	20030430	HR 2001-484		20010626
HK 1042084	A1	20050902	HK 2002-103400		20020504
PRIORITY APPLN. INFO.:			DE 1998-19854933	A	19981127
			DE 1999-19916460	A	19990412
			WO 1999-EP9004	W	19991123
			US 2001-856686	E	20010524

OTHER SOURCE(S): MARPAT 133:17464

GI



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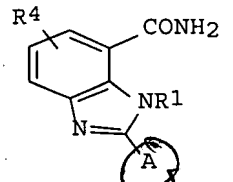


II

def ?

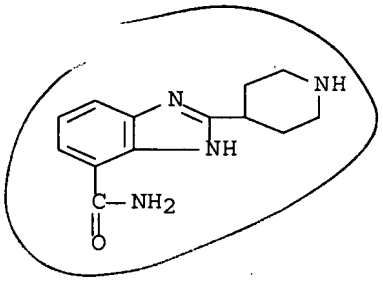
AB Title compds. [I, II; R1 = H, (substituted) (O- or imino-interrupted) alkyl; R4 = H, alkyl, Cl, Br, F, NO2, cyano, amino, acylamino, etc.; A = (unsatd.) 4-8 membered (substituted) heterocyclyl], were prepd. as PARP inhibitors (no data). Thus, 1-(tert-butyloxycarbonyl)piperidine-4- carboxylic acid, Et 2,3-diaminobenzoate, Et3N, and hydroxybenzotriazole in THF at 0.degree. were treated with N'-(3-dimethylaminopropyl)-N- ethylcarbodiimide followed by 24 h stirring to give N-(2-amino-3- ethoxycarbonyl)-1-(tert-butyloxycarbonyl)piperidine-4-carboxanilide. This was refluxed 30 min. in HOAc to give Et 2-[1-(tert- butoxycarbonyl)piperidin-4-yl]benzimidazole-4-carboxylate, which was converted to 2-piperidin-4-ylbenzimidazole-4-carboxamide dihydrochloride.

IT 272769-46-7P 272769-47-8P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use);

BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of benzimidazolecarboxamides as poly(ADP-ribose)polymerase inhibitors)

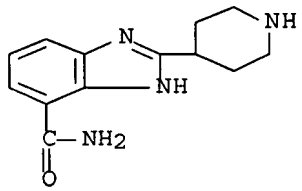
RN 272769-46-7 CAPLUS
CN 1H-Benzimidazole-4-carboxamide, 2-(4-piperidinyl)-, dihydrochloride (9CI) (CA INDEX NAME)



●2 HCl

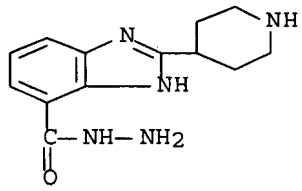
103A rejection ?

RN 272769-47-8 CAPLUS
CN 1H-Benzimidazole-4-carboxamide, 2-(4-piperidinyl)- (9CI) (CA INDEX NAME)



IT 272769-72-9P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(prepn. of benzimidazolecarboxamides as poly(ADP-ribose)polymerase inhibitors)

RN 272769-72-9 CAPLUS
CN 1H-Benzimidazole-4-carboxylic acid, 2-(4-piperidinyl)-, hydrazide (9CI) (CA INDEX NAME)



REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

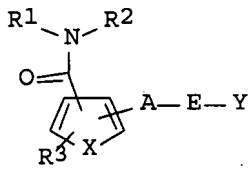
L4 ANSWER 10 OF 10 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1998:394328 CAPLUS Full-text
DOCUMENT NUMBER: 129:67773
TITLE: Preparation of benzamide derivatives having a vasopressin antagonistic activity
INVENTOR(S): Setoi, Hiroyuki; Ohkawa, Takehiko; Zenkoh, Tatsuya; Sawada, Hitoshi; Sawada, Yuki; Oku, Teruo
PATENT ASSIGNEE(S): Fujisawa Pharmaceutical Co., Ltd., Japan
SOURCE: PCT Int. Appl., 332 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9824771	A1	19980611	WO 1997-JP4192	19971118
W: AU, CA, CN, HU, IL, JP, KR, MX, US, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
AU 9749672	A	19980629	AU 1997-49672	19971118
EP 946519	A1	19991006	EP 1997-912493	19971118
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, PT, IE, FI				
JP 2001505193	T	20010417	JP 1998-521225	19971118
US 6207693	B1	20010327	US 1999-308662	19990602
US 6316482	B1	20011113	US 2000-614132	20000711

PRIORITY APPLN. INFO.:

AU 1996-3953	A	19961202
WO 1997-JP4192	W	19971118
US 1999-308662	A3	19990602

OTHER SOURCE(S): MARPAT 129:67773
GI



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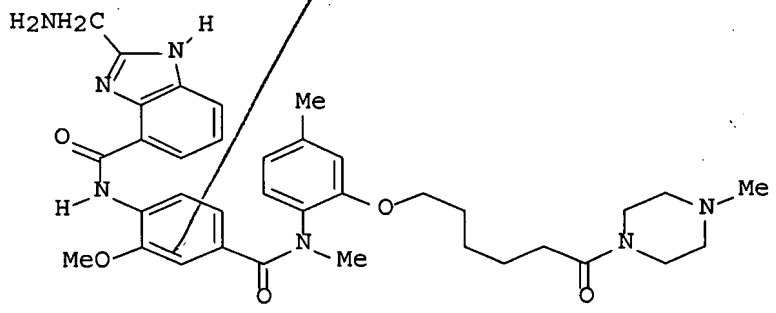


II

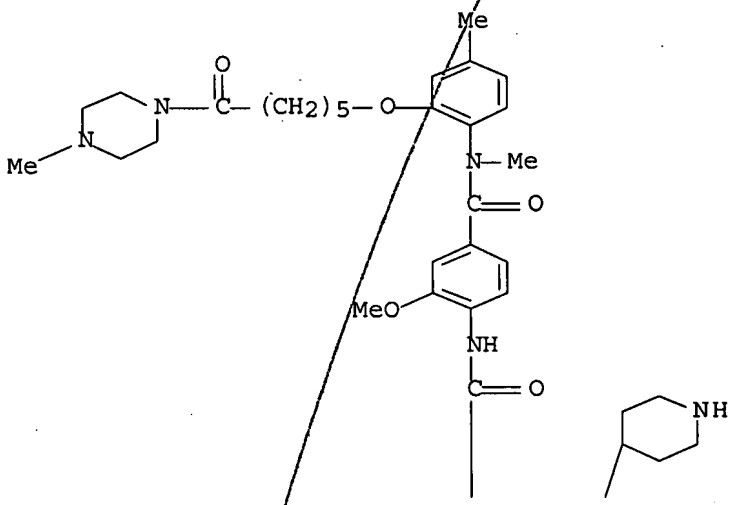
AB The title compds. [I; R1 = (un)substituted aryl, cyclo(lower)alkyl, heterocyclyl; R2 = H, lower alkyl, etc.; R3 = H, halo, OH, etc.; A = a single bond, O, NH; E = lower alkylene, lower alkenylene, etc.; X = CH:CH, CH:N, S; Y = (un)substituted aryl, condensed heterocyclyl, etc.] and their pharmaceutically acceptable salts, useful in treatment and/or prevention of hypertension, heart failure, renal insufficiency, edema, ascites, vasopressin parasecretion syndrome, hepatocirrhosis, hyponatremia, hypokalemia, diabetic, circulation disorder, cerebrovascular disease, Meniere's disease or motion sickness, were prepd. Thus, the title compd. II showed IC50 of 1.5 nM against vasopressin 1 receptor binding.

IT 208770-38-1P 208771-48-6P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of benzamide derivs. having a vasopressin antagonistic activity)

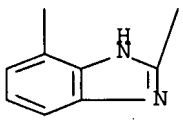
RN 208770-38-1 CAPLUS

CN 1H-Benzimidazole-4-carboxamide, N-[2-methoxy-4-[[methyl[4-methyl-2-[[6-(4-methyl-1-piperazinyl)-6-oxohexyl]oxy]phenyl]amino]carbonyl]phenyl]-2-(4-piperidinyl)- (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 2-A

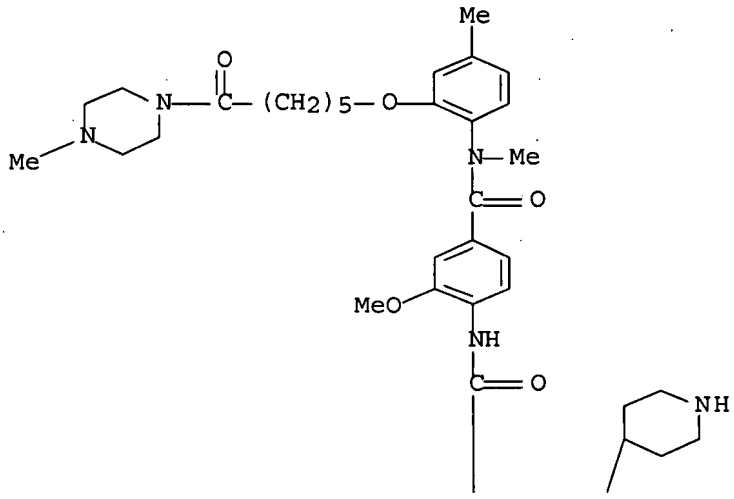


RN 208771-48-6 CAPLUS

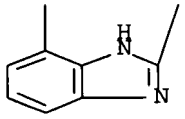
CN 1H-Benzimidazole-4-carboxamide, N-[2-methoxy-4-[[methyl[4-methyl-2-[[6-(4-methyl-1-piperazinyl)-6-oxohexyl]oxy]phenyl]amino]carbonyl]phenyl]-2-(4-

piperidinyl)-, trihydrochloride (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 2-A



●3 HCl

REFERENCE COUNT: 17 THERE ARE 17 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

=>

=>
Executing the logoff script...

=> LOG H

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	53.17	225.93
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	-7.80	-7.80

SESSION WILL BE HELD FOR 120 MINUTES
STN INTERNATIONAL SESSION SUSPENDED AT 14:20:45 ON 13 AUG 2007